

## **IN THE CLAIMS**

1. (Previously Presented) Communication system, comprising: a network, one or more optical transmitters and that may be subjected to potential noise sources, wherein the communication system includes an adaptive filter coupled between the potential noise sources and the at least one optical transmitter, which filter has a cut-off frequency, dependent on the noise frequency, and a noise detector, wherein the adaptive filter (1) blocks detected impulse noise from passing upstream through the communication system, (2) enables prevention of clipping of the optical transmitter and (3) enables substantially undisturbed upstream communication above the cut-off frequency of the filter.

2. (Canceled)

3. (Previously Presented) Communication system according to claim 1, wherein the filter is arranged as a high pass filter and/or a low pass filter.

4. Canceled.

5. (Currently Amended) Communication system according to claim **41**, wherein the communication system comprises a threshold detector and a controllable switch having a control input coupled to the threshold detector.

6. (Previously Presented) Communication system according to claim 5, wherein the communication system comprises a summing device for summing at least one filtered version of an impulse noise containing RF signal.

7. (Previously Presented) A filter for application in the communication system according to claim 1, wherein the filter has a cut-off frequency, which is chosen in

dependence on the noise frequency, wherein the cut-off frequency of the filter lies in the range of 10 to 15 MHz.

8. (Canceled)